Important Information for Visitors



 $Fall\ scene$

The refuge headquarters, typically open 8:00 am to 4:30 pm weekdays, is located in a renovated 150-year old farmhouse at 1547 County Route 565 (Glenwood Road) in Vernon Township, New Jersey. Public restrooms are located at the parking lot and are open daily. GPS location: N41 12.013 W074 33.853. All trails are open from dawn to dusk.

America the Beautiful National Park Passes are sold at the refuge headquarters. Call 973/702 7266 x 10 for availability.

Observe wildlife from a safe and respectful distance. Binoculars, spotting scopes, and telephoto lenses allow you to view wildlife closely without disturbing them. Stay on maintained trails.

Please do not feed wildlife. Feeding wildlife trains animals to be unnaturally dependent on and less frightened of humans, concentrates animals in one area and may make them more susceptible to disease.

Please take memories and photographs. Do not gather or disturb any plants, flowers, insects, or wildlife.

The U.S. Fish and Wildlife Service protects archaeological sites from destruction during its own activities. It is against the law to damage archaeological sites or remove archaeological artifacts such as old bottles or arrowheads on the refuge.

Leashed dogs are allowed on the Liberty Loop Trail. To protect resting wildlife, pets are not otherwise allowed on the refuge.

Camping, horseback riding, bicycling, all-terrain vehicles, dirt bikes and snowmobiles, and overnight parking are prohibited.

Wallkill River National Wildlife Refuge 1547 County Route 565 (Glenwood Road) Sussex, New Jersey 07461-4013 973/702 7266 1 800/852 7899 TDD 1 800/852/7897 voice http://www.fws.gov/refuge/wallkill_river/

Federal Relay Service for the deaf and hard-of-hearing 1 800/877 8339

U.S. Fish & Wildlife Service 1 800/344 WILD http://www.fws.gov

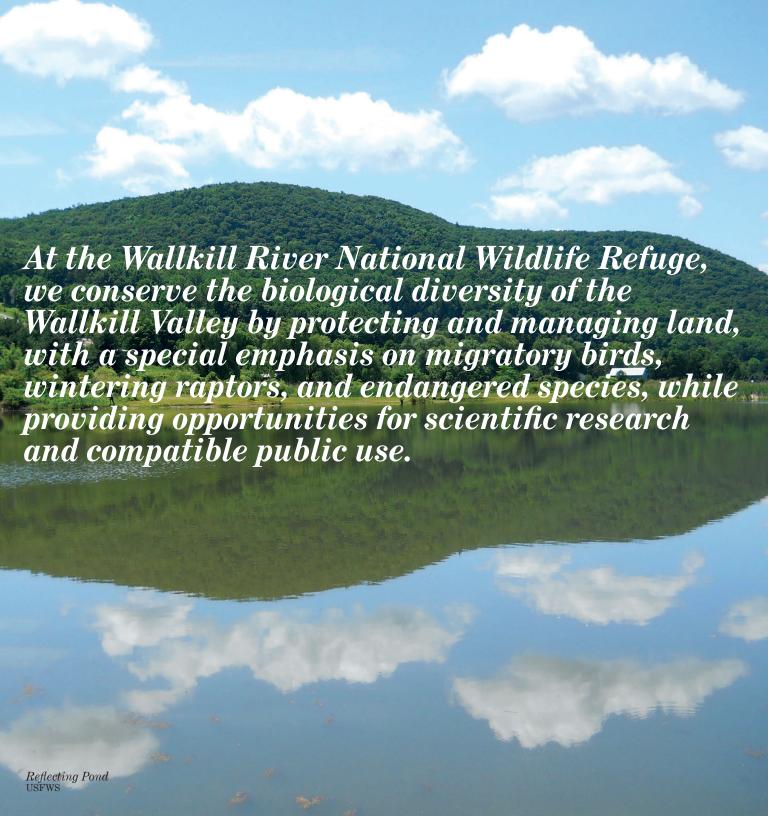
January 2016





U.S. Fish & Wildlife Service Wallkill River National Wildlife Refuge

Monarchs ©Karen VanDyk



Our mission



This blue goose, designed by J.N. "Ding" Darling, has become the symbol of the National Wildlife Refuge System.

Welcome to Wallkill River National Wildlife Refuge (NWR). Congress established the refuge in 1990 "to preserve and enhance refuge lands and waters in a manner that will conserve the natural diversity of fish, wildlife, plants, and their habitats for present and future generations and to provide opportunities for compatible scientific research, environmental education, and fish and wildlifeoriented recreation." Congress also required the protection of aquatic habitats within the refuge, including the Wallkill River and Papakating Creek.

Wallkill River NWR is administered by the U.S. Fish and Wildlife Service as part of the National Wildlife Refuge System, whose mission is "to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

Shaped by Nature and People

The Wallkill River begins in Sparta, New Jersey, flows north through Orange and Ulster Counties in New York, and merges with the Rondout Creek to flow into the Hudson River.

Volunteer USFWS





Wallkill River in winter

The refuge is located along a ten-mile stretch of the Wallkill River, and lies in a rolling valley within the Appalachian Ridge and Valley physiographic province. The Wallkill Valley is bounded by the Kittatinny Ridge to the west and the Hudson Highlands to the east. This area is part of the Great Valley, which extends from Canada to the southeastern United States.

As the ice sheets retreated from the Wallkill Valley area, a glacial lake formed. The region's major wetlands are former glacial lake bottoms, and the lake's organic muck soils support extensive bottomland hardwood forests, wet meadows, and farm fields. The valley is underlain by limestone, with outcroppings sometimes appearing as "islands" along the river and in adjoining wetland complexes.

Occupation of the valley by Native Americans began as early as 10,000 B.C. The Wallkill River was first known by the Lenape people as "Twischsawkin," meaning "the land where plums abound." The Wallkill Valley was an important source of flint and chert for Native Americans, who used these stones for hunting and cutting tools.

Beginning in the 1600s, European settlers followed the Wallkill River south from settlements along the Hudson River. It is thought the river was named for Holland's Waal River. With the bottomlands along the Wallkill River flooding extensively, the area became known as "The Drowned Lands." As early as 1775, people tried to drain the river for farming. The effort did not succeed until 1835 when a large canal lowered the river's water table. Mill owners, however, sought to keep the lands flooded, beginning the battle known as the "Muskrat and Beaver" wars. The disputes ended in the farmers' favor in 1872. The fertile Wallkill Valley continues to sustain a variety of agriculture including fruits, vegetables and sod.

A Variety of **Habitats**

At 6,000 acres Wallkill River National Wildlife Refuge is a mosaic of habitats. Swamps and floodplain forests of red maple, river birch, American sycamore, green ash, buttonbush, silky dogwood, highbush blueberry, spicebush, skunk cabbage, marsh marigold, cardinal flower, and sensitive fern characterize much of the refuge.

A small Atlantic white cedar forest grows on the refuge. The mixed hardwood forests of the higher elevations include sugar maple, white oak, shagbark hickory, flowering dogwood, witch hazel, mayapple, and columbine.

Grasslands and scrub-shrub habitats are important refuge communities. The original native grasslands and extensive wetlands occurring alongside the river before it was

Great blue herons and Great egrets





Indigo bunting

channelized are gone. Farmers have planted cool season grasses at the river's edge and in upland meadows for haying, and some native warm season grasses have been restored in these fields.

Another important habitat of the refuge is the river and its tributaries. The Papakating Creek, almost as big as the Wallkill, forms a wide wetland area west of refuge headquarters.

The refuge also manages 335 acres of former sod farm as waterfowl impoundments. By controlling the water levels in this area, the land can support large numbers of waterfowl and shorebirds.

Bobolinks, Bog Turtles, Black Ducks, and More

The Wallkill River bottomland is one of the few large areas of high quality waterfowl habitat remaining in northwestern New Jersey. As a major watershed and wetland area, the Wallkill River provides migratory and nesting habitat for Atlantic flyway black duck populations as well as wood duck, mallard, green-winged teal, common mergansers and Canada geese.

Eastern bluebirds





Impoundment ©Karen VanDyk

More than 260 species of birds occur on the refuge, including 29 species of waterfowl, 22 species of raptors and 31 species of shorebirds. You may also find many species of marshbirds, wading birds, and songbirds. A chorus of red-winged blackbirds and the spectacular courtship display of the American woodcock are some of the earliest harbingers of spring.

In summer, the indigo bunting, bobolink, scarlet tanager, Baltimore oriole, grasshopper sparrow, field sparrow, cedar waxwing, chestnutsided warbler and other songbirds bring color and melody to the refuge. Kestrels commonly nest on the refuge, and the barred owl's "whocooks-for-you" call is often heard. The fall migration brings waterfowl, shorebirds, and other songbirds that had nested further north to the refuge. Raptors are plentiful during fall migration as well, when sharpshinned hawks, Cooper's hawks,



Great blue heron rookery Ken Witkowski/USFWS

and broad-winged hawks fill the sky on clear September days. Short-eared owls, northern harriers, and roughlegged hawks are found primarily during the winter.

The diverse mammal population includes bats, beaver, muskrat, river otter, mink, red fox, gray fox, coyote, white-tailed deer, and black bear. While amphibian and reptile populations are generally declining due to habitat loss and degradation, the Wallkill River valley provides some of the best remaining habitat for salamanders, frogs, turtles and snakes in the northeast. Of special significance on the refuge are the bog turtle (a federally threatened species) and the Indiana bat (a federally endangered species), both protected by the Endangered Species Act.

Short-eared owl



The refuge supports 66 species identified in New Jersey as threatened, endangered or of special concern, and 14 species listed in New York.

The Wallkill River provides an excellent warmwater fishery for largemouth bass, pickerel, perch, sunfish, and bullheads. Some of the streams that enter the Wallkill River have native brook trout populations.

Habitat Management



Prescribed burn



Management through cooperativefarming

Enjoying Your Refuge

Preschool bird walk

Refuge management is focused on conserving, restoring, and enhancing the natural diversity of fish, wildlife, plants, and their habitats along the Wallkill River. Many of the historic wetland areas along the Wallkill River were drained in the past. Management activities include restoring some areas to their natural wetland condition, creating "potholes" which hold spring and fall floodwaters in areas where the original hydrology cannot be restored, managing some areas as moist soil units for waterfowl and wading birds, and controlling invasive plant species to improve habitat for wildlife.

Grassland and forest areas are important to raptors and songbirds and will be maintained and enhanced for nesting and migrating species. The refuge has an active grassland restoration and management program which includes prescribed burns. A special use program provides opportunities for local farmers to harvest hay in late summer from the refuge.

The National Wildlife Refuge System Improvement Act of 1997 designated wildlife-dependent recreation as an important part of refuge management. If compatible, refuges are to offer opportunities for wildlife observation and photography, hunting and fishing, and environmental



Visitor Opportunities

There are five nature trails on the refuge. In winter, with proper snow conditions, cross country skiing and snowshoeing are permitted on these trails.

education and interpretation. The refuge provides many opportunities for visitors to get closer to nature.



Birding on the Liberty Loop Trail

The Wood Duck Nature Trail passes through wetlands and wet meadows for 1.6 miles on an abandoned railroad bed, ending at the Wallkill River. The first 0.6 mile is wheelchair accessible. The trail includes a wildlife photography blind, several benches, and interpretive signs that describe wildlife and habitat.

The 2.5-mile Liberty Loop Trail was created on a former sod farm. The trail hosts the Appalachian Trail for 1.5 miles. The trail loops around the refuge's impoundments, providing an excellent opportunity to observe waterfowl and shorebirds in the spring and fall and the short-eared owls in the winter.

The Dagmar Dale Nature Trail travels from refuge headquarters down to the Wallkill River traversing hilly terrain, woodlands and field habitats. There are two loops to this trail – the North Loop is 1.7 miles and provides expansive views of the Wallkill Valley and the Kittatinny mountains. The South Loop is 1 mile including a short spur trail to a scenic waterfall. Both loops are excellent places to observe forest song birds, grassland birds and raptors.

A view from Dagmar Dale North Loop April Oleksy







Fishing dock at Owens Station Crossing USFWS



Spotted Jewelweed

The Timberdoodle Trail follows an old railbed, beginning at Bassett's Bridge Road and traveling south for 2.3 miles. Timberdoodle is an old folklore name for the American woodcock, which can be observed performing its courtship display along the trail in early spring. This area provides excellent songbird nesting habitat for American redstart, northern waterthrush, wood thrush, veery, red-eyed vireo and numerous others.

The Winding Waters Trail follows an old farm road for 2.1 miles along the river and through restored fields, beginning at the Canoe Launch at Oil City Road. The area provides excellent stopover habitat for flocks of bobolink and waterfowl throughout the year, as well as hunting grounds for raptors.

Wildlife Photography

Photography is allowed in any area open to the general public. A special use permit is required for access to other refuge lands. There can be a fee for the permit. Contact the refuge manager for additional information.

Canoeing/ Kayaking

One of the best ways to see the Wallkill River refuge is by canoe or

Child's first catch



Fishing

kayak. You will experience the great diversity of habitats that make the refuge unique. Canoeing takes you through floodplain forests, wet meadows and by tall rock cliffs. Water levels in the river fluctuate seasonally. During spring, the wet meadows may be flooded, making the river channel difficult to follow. Conversely, by mid summer, the river may not be passable due to low water levels. Autumn rains generally raise the water level once again. Snags and fallen trees are not always removed, so be prepared to haul your canoe over beaver dams and downed trees. Please use caution when moving your canoe in or out of the river as steep. slippery banks and unstable slopes are common.

There are three access points to the Wallkill River on the refuge. Refer to the fold-out map for access locations.

Fishing access is provided at Bassetts Bridge, Owens Station Crossing and Oil City Road. Fishing is also allowed anywhere along the river that can be reached by boat. Please look for refuge boundary signs to ensure you are on refuge land. While all anglers must comply with New Jersey or New York fishing license requirements, no special refuge fishing permit is required.

Handicapped Fishing Access



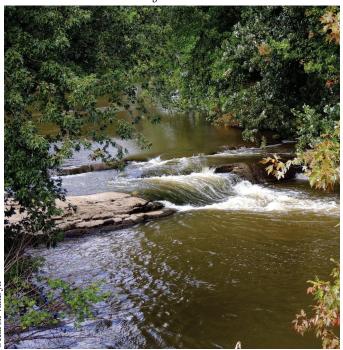
SEWS

Owens Station Crossing

The long awaited property at Owens Station Crossing is now open to the public. This former soil mining site has a 50 acre lake that is open for fishing and boating. Canoes, kayaks and boats with electric motors are permitted on the lake. A dock with a ramp that is compliant with the Americans with Disabilities Act (ADA) has been installed. This allows for handicapped individuals to fish from the dock or launch a kayak. Please note that fishing is "catch and release" and ice fishing is not permitted.

In addition to the fishing access, there is also a ¾ mile trail that runs from Owens Station Road to Bassett's Bridge Road where you can continue your walk on the Timberdoodle Trail going south. From the parking area, you can also access the trail going north that connects with the Liberty Loop Trail. This area is designated as a permanent no hunting zone.

Wallkill River on Winding Waters Trail





National Archery in the Schools program

Hunting



Youth hunters

The refuge offers hunting on approximately 5,000 acres, with permanent no-hunting areas located at the Liberty Loop Trail and Owens Station Crossing. Hunting is a tool used to manage some wildlife populations and is a Congressionallymandated priority public use of the Refuge System. Hunters must obtain a refuge hunt permit online at www. wallkillriverpermits.com in addition to having all applicable state licenses and permits. Special refuge hunts are available for eligible youth and mobility impaired hunters, though space is often limited. Contact the refuge for details regarding special hunts or visit the refuge website at http://www.fws.gov/refuge/wallkill river/ for more information.

Camping in the Area







Interested in camping? There are several New Jersey state parks and forests nearby which offer cabins and campsites. Stokes State Forest, High Point State Park and Wawayanda State Park are all within ½ hour from the refuge headquarters. Call 855/607 3075 or visit http://www.state.nj.us/dep/parksandforests/ for details.

Volunteering

If you would like to volunteer, we can use your help! Trail maintenance requires a lot of time – volunteer help is deeply appreciated. Other volunteers do construction work,



Shawangunk Grasslands NWR

public programs, or help us collect biological data. The refuge also maintains 4 RV hookups for those interested in volunteer workamping. Contact the refuge office for more information.

Visiting other refuges within our complex

The staff at Wallkill River also administer two other non-staffed refuges. Shawangunk Grasslands NWR (located in Ulster County, NY) is a prime destination for bird watchers, providing exceptional habitat for grassland-dependent migratory birds and wintering raptors. Cherry Valley NWR (located in Monroe County, PA) provides

Overlooking the Cherry Valley



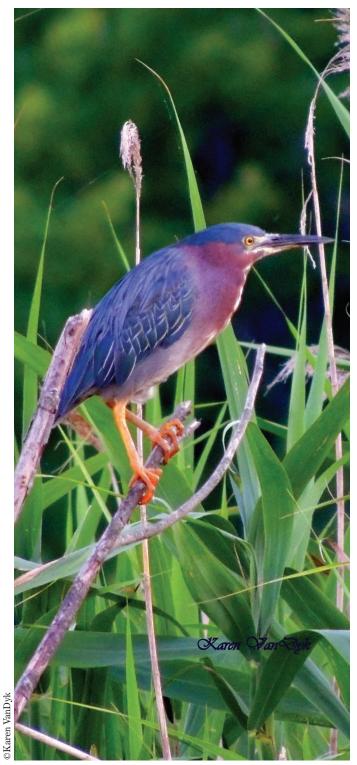


Monitoring purple martin colony

Spotted skimmer



©Herb Houghton



native forest, wetland, and grassland habitats that support migratory birds and other trust species. For more information, visit the refuge websites at: http://fws.gov/refuge/shawangunk_grasslands and http://www.fws.gov/refuge/cherry_valley.

Wallkill River NWR is one of more than 560 refuges in the National Wildlife Refuge System administered by the U.S. Fish and Wildlife Service. The National Wildlife Refuge System is a network of lands and waters managed specifically for the protection of wildlife and wildlife habitat and represents the most comprehensive wildlife management program in the world. Units of the system stretch across the United States from northern Alaska to the Florida Keys and include small islands in the Caribbean and South Pacific. There are now over 50 million acres of marine monuments in the system as well. The character of the refuges is as diverse as the nation itself.

The Service also manages national fish hatcheries and provides federal leadership in habitat protection, fish and wildlife research, technical assistance and the conservation and protection of migratory birds, certain marine mammals and threatened and endangered species.

White-tailed deer



© Herb Houghton

Green Heron

